



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,819	12/31/2003	William P. Alberth JR.	CS23362RL	9363
20280	7590	09/28/2006	EXAMINER	
MOTOROLA INC 600 NORTH US HIGHWAY 45 ROOM AS437 LIBERTYVILLE, IL 60048-5343			LEVITAN, DMITRY	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,819

Applicant(s)

ALBERTH ET AL.

Examiner

Dmitry Levitan

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-14 and 16-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6, 8-14 and 16-21 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 12 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Art Unit: 2616

Amendment, filed 9/10/06, has been entered. Claims 1-6, 8-14 and 16-21 remain pending.

Drawings

1. The drawings were received on 06/12/04. These drawings are not approved because of a typographical error on Fig. 4: storage element 203 instead of 208.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

In light of Applicant's amendment, the rejection of claims 12-14 and 16-21 under 35 U.S.C. 112, second paragraph, has been withdrawn.

Claim Rejections - 35 USC § 103

2. Claims 1, 3-6, 9, 10, 12-14, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Selby (US 4,876,738) in view of Chen (US 6,922,561).

3. Regarding claims 1, 9, 10, 12 and 21, Selby teaches a method and apparatus for maintaining registration information for a plurality of different communications areas within a network (mobile stations M shown on Fig. 1 and 2, registered with base stations BS in corresponding service areas 6:13-25) comprising:

Registering in a first communication area, where the wireless communication unit is located (station M1 is registered with service area SA1 on Fig. 1 and 6:22-25),

Moving into a second communication area, which is different than the first communication area (M1 moving to another service area SA2 and registering with it 6:36-50),

Art Unit: 2616

Registering in the second communication area, while retaining at least the most recent prior registration associated with the previous communication area (keeping the registration with a previous service area 6:50-7:11), wherein the default operating mode include retaining at least the two most recent area registrations (M1 created for itself new area comprising SA1 and SA2 7:11-20).

Selby does not teach associating each communication area with one of plurality of paging groups, associating and registering with a different paging group and paging group area detect module.

Chen teaches associating each communication area with one of plurality of paging groups (configuring a paging area based on a certain number of cells around the cell in which the Mobile Unit is registered, as step 1306 on Fig. 13 and 10:57-11:3), associating and registering with a different paging group (registration for a paging group as steps 1302-1306 on Fig. 13, wherein the registration process comprises storing a limited number of previous registrations 9:40-10:56) and paging group area detect module (controller 230 on Fig. 2 performing registration of Mobile Unit 206 for a paging group 3:53-65 and 5:5-9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add associating and registering with paging groups and paging group area detector of Chen to the system of Selby to improve the system operation with a group directed calls (Chen 1:32-55), wherein communication areas are define by paging groups.

In addition, regarding claims 9 and 10, Selby teaches retaining previous registrations automatically without any specific instructions or service option control message (flow chart on Fig. 3 disclosing the operation of a mobile unit as described above in claim 1 rejection and item

Art Unit: 2616

27 on the flow chart of Fig. 3, wherein the mobile unit receives by broadcast a new number of registrations, inherently overriding an old/default value 11:5-6 and 7:20-23).

In addition, regarding claims 12 and 21, Selby teaches a wireless communication device comprising (mobile station on Fig. 2 and 10:15-45 of cellular system on Fig.1):

A transceiver adapted for communication with a network (transmitter 1 and receiver 2 on Fig. 2 and 10:15-19),

A processor coupled to the transceiver (processor 4 and program store 5 on Fig. 2 and 10:20), the processor including

An area detection module adapted for detecting the area in which the wireless communication device is located (inherently part of the processor, because detecting the location area for a mobile station is essential for the station to register with the corresponding base station of the area as shown on Fig. 1 and 6:13-35), and

A registration module adapted for registering the wireless communication device with the network (inherently part of the processor, because registration of the mobile station with the corresponding base station of the area as shown on Fig. 1 and 6:13-35), and

A storage element coupled to the processor and adapted for retaining registration information for a plurality of areas (storage means 6-10 to store registration records 10:40-45, as retaining registration information for a plurality of areas was disclosed in the rejection of claim 1).

4. Regarding claim 3, Selby teaches a method comprising moving back into the first communication area, without registering in the first communication area, when the registration

Art Unit: 2616

from the user's prior presence in the first communication area is still retained (When M1 roam back into SA1, it does not register with SA1, because it is still registered with SA1 7:5-11).

5. Regarding claims 4-6, Selby teaches a method comprising moving to a third communication area, different from the first and the second, while retaining the registration from at least the previous area within which the user was most recently located (registering in a maximum number of n areas and storing the registrations 7:21-31) and discarding any registration not associated with the present area and the most previous areas and associated with the least recent previous area (if the numbers of stored registration will exceed n, deleting the oldest stored identity 7:31-40).

6. Regarding claim 13, Selby teaches a processor including a registration discard module adapted for discarding registration associated with areas in which the wireless communication device was recently located, when the number of registrations exceeds the number of registration being retained (inherently part of the processor 4 and program store 5 on Fig. 2, because Selby teaches deleting the oldest registration when the number of the registrations exceeds n 7:28-34).

7. Regarding claim 14, Selby teaches a processor including a comparison module adapting for comparing the area in which the wireless device is located with the registration information retained within the storage element, wherein if a registration associated with the current location of the wireless device is not retained in the storage area, then producing a control signal adapted for initiating a registration by the registration module (inherently part of processor 4 and program store 5 on Fig. 2, because Selby teaches a mobile station producing a registration signal, when it is located in a service are, the identity of which is not stored in the mobile station storage element, effectively comparing the current storage area with the storage record 1:53-2:8).

Art Unit: 2616

8. Regarding claim 16, Selby teaches a module of said processor includes a set of prestored instructions (program store 5 on Fig. 2 and 10:17-23).

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Selby in view of Chen in further view of Purnadi (US 6,708,031).

Regarding claim 2, Selby in view of Chen teaches all the limitations of the parent claim 1 (see rejection above).

Selby in view of Chen does not teach associating each communication area with different packet zone identification.

Purnadi teaches associating each communication area with a different packet zone identification (broadcasting a Packet Zone ID to mobile stations to identify their communication area by different Packet Zone ID 6:35-7:36).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add associating each communication area with a different packet zone identification of Purnadi to the system of Selby in view of Chen to make the system compatible with widely used cdma2000 networks by utilizing cdma2000 Packet Zone ID method.

10. Claims 8 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Selby in view of Chen in further view of Frid (US 6,560,239).

Regarding claims 8, 18 and 19, Selby teaches all the limitations of the parent claims 1 and 12.

Selby in view of Chen does not teach registration to support a packet data communication in the associated area and the mobile unit processor including packet data and packet data voice modules.

Frid teaches registration to support a packet data communication in the associated area (mobile unit DTE/MS 130 on Fig. 1 establishing the parameters of computer/packet data communication protocol during registration 6:31-43) and the mobile unit processor including packet data and packet data voice modules (inherently part of DTE/MS 130 on Fig. 1, because it supports both packet data/DTE and voice communications, including voice over IP 4:53-64). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add method of Frid to the system of Selby to make the system compatible with widely used packet data and voice systems.

Regarding claim 17, Selby teaches all the limitations of the parent claim 12. Selby does not teach storing some of the prestored instructions in the storage element.

Frid teaches storing some of the prestored instructions in the storage element (storing necessary instructions for the mobile unit processor in memory 135 on Fig. 1 and 4:33-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add method of Frid to the system of Selby in view of Chen to make the system faster by storing rarely used instructions outside the mobile unit's processor.

11. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Selby in view of Chen and in view of Frid in further view of Purnadi.

Selby in view of Chen and in view of Frid teaches all the limitations of the parent claim 18.

Selby in view of Chen and in view of Frid does not teach utilizing CDMA in the system.

Art Unit: 2616

Purnadi teaches using CDMA standard (cdma2000 packet switched network on Fig. 3 and 4:44-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add utilizing CDMA of Purnadi to the system of Selby in view of Frid to improve the system compatibility with widely used standard.

12. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Selby in view of Chen in further view of Lawrence (US 6,628,935).

Selby in view of Chen teaches a method for maintaining registration information for a plurality of different communications areas associated with different paging groups. (see rejection of claim 1 above).

Selby also teaches deleting the service registration record in the mobile station when the mobile station is out of communication range of any of the base stations 7:56-8:17.

Selby does not teach discarding any previous stored registrations on powering up and powering down.

Lawrence teaches deleting the stored messages in a mobile device upon the power up/down 2:12-34 to save memory space in the mobile device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add discarding any previous stored registrations on powering up and powering down of Lawrence to the system of Selby to make the system more flexible by manual implementation of the discarding any previous stored registrations of Selby to give more control of the mobile telephone to a user, as it is common to reinitialize/refresh a device with a memory on powering up and powering down.

Response to Arguments

13. Applicant's arguments filed 09/10/06 have been fully considered but they are not persuasive.

On page 6 of the Response, Applicant argues that Chen does not teach associating and registering with a different paging group, because a number of cells in a paging area is limited. Examiner respectfully disagrees.

Chen teaches associating and registering with a paging group, shown on the Fig. 12 and 13, wherein the paging area can comprise a limited number of cells, 10:57-11:3.

The number of cells of Chen defines the size of the paging area and has no relations to the registration limitations, because the registration is arranged by the paging area.

Therefore Applicant's arguments directed to the number of cells in the paging area is irrelevant, because the number of cells is used only for definition of the paging area.

In addition, the quotation of Chen, 10:25-30, is directed to an alternative embodiment, wherein the mobile unit registration is arranged by cells, different from the embodiment, shown on Fig. 13, where the mobile unit registration is arranged by paging areas.

On page 7 of the Response, Applicant argues that Lawrence (US 6,628,935) does not teach deleting the stored messages in a mobile device upon the power up/down to save memory space in the mobile device.

Examiner respectfully disagrees.

Art Unit: 2616

Lawrence clearly teaches deleting the stored messages in a mobile device upon the power up/down 2:12-34 to save memory space in the mobile device.

Lawrence teaching of an indicator to alert the user on the low memory status does not contradict the teaching of deleting the stored messages in a mobile device upon the power up/down to save memory space in the mobile device.

Applicant's arguments, directed to particular type of messages (SMS), being deleted, are irrelevant, because it is the method of Lawrence, not the type of messages, what has been used in the claims rejection (see claim 11 rejection under 35 U.S.C. 103(a) above).

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2616

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7529. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to be 'DL' followed by a stylized, cursive signature.

Dmitry Levitan
Examiner
Art Unit 2616